

NEW SPECIES OF OTITIDAE FROM CALIFORNIA  
(Diptera)

BY SAMUEL C. HARRIOT

I wish to express my sincere thanks to Dr. C. H. Curran for his helpful criticism in the preparation of this paper. The specimens described are from the collections of Dr. Mont A. Cazier, Mr. Bernard Brookman, and Dr. T. H. G. Aitken. The drawing is by Miss Alice Gray.

The following key will help to separate the described species of *Tritoxa* Loew.

TABLE OF SPECIES

1. All black species; posterior cross-vein almost perpendicular.  
..... *flexa* Wiedemann
- . Brownish or reddish yellow species.....2
2. Face with a red median longitudinal mark.....4
- . Face without such a red mark; abdomen mostly black.....3
3. Thoracic dorsum with two distinct, whitish, pollinose, longitudinal stripes; third hyaline cross-band arcuated...*incurva* Loew
- . Thoracic dorsum without distinct longitudinal stripes; third hyaline cross-band almost perpendicular and straight.....  
.....*cuneata* Loew
4. Posterior cross-vein with a spur in the middle....*ra*, new species
- . Posterior cross-vein without such a spur.....*pollinosa* Cole

*Tritoxa ra* Harriot, new species

(Fig. 1)

A slender reddish yellow species. Length, 6 to 7 mm.

Male: Front opaque, reddish yellow except for a narrow whitish pollinose strip along inner margin of eyes. Occiput shining reddish yellow, posterior orbits white pollinose extending to the oral margin. Face yellowish, whitish in certain lights, a reddish mark in the center extending from oral margin about half way up the face; cheeks wholly brown below the eyes. Front wider than one eye, with sparse black hairs except between the upper pair of frontals; cheeks about three-fifths the eye height. Two pairs of reclinate frontals; verticals moderately strong, ocelars short and proclinate. *Proboscis* brown; palpi yellowish with black hairs. *Antennae* reddish yellow, third segment about one-third as wide as long; arista black and finely pubescent. *Thorax* reddish yellow; mesonotum opaque, the posterior portions of humeri and sides of mesonotum behind suture shining; a dark brown stripe covered with whitish pollinose extending from

slightly before anterior supra-alar bristle to base of wing. Thoracic dorsum with two parallel grayish pollinose stripes; ground color underneath stripes black. Pleura shining, reddish yellow, lightly whitish pollinose when viewed obliquely; sternopleura surrounding the bristle dark brown; a whitish pollinose area above front coxæ. Scutellum shining reddish yellow, dark brown on apical half. *Legs* reddish yellow, tarsi darker. *Wings* brown with three hyaline cross-bands as figured. Longitudinal and cross-veins sinuous; a spur in the middle of posterior cross-vein. Squamae and halteres white. *Abdomen* reddish yellow, with many short black bristles.

Female. Similar to male. Ovipositor shining reddish yellow, darkened at apex of first segment, with short sparse black hairs.

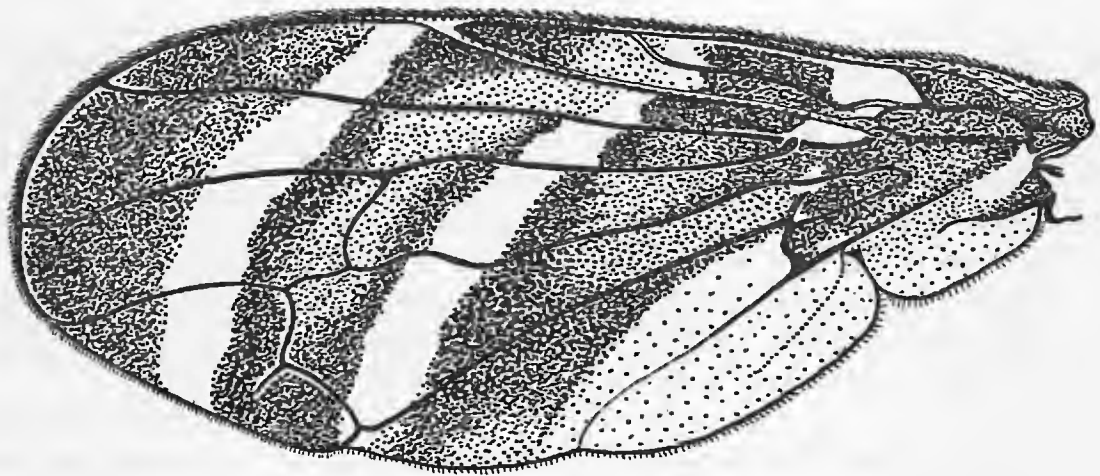


Figure 1. Wing of *Tritoxa ra* Harriot, n. sp.

Holotype, male, Lone Pine, Inyo County, California, June 16, 1937 (Cazier collection). Allotype, female, Lone Pine, Inyo County, California, June 6, 1937 (L. D. Phillips). Paratype, male, Diaz Lake, Owens Valley, Inyo County, California, June 7, 1937 (Aitken collection). The holotype is in the American Museum of Natural History; the allotype, No. 5229, and paratype have been deposited in the California Academy of Sciences.

#### *Euxesta brookmani* Harriot, new species

This species traces out to *scutellaris* Curran in his key to American *Euxesta* Loew (Amer. Mus. Novitates, No. 812, p. 12) but is larger, the wings are clear hyaline not whitish, the costal and subcostal cells are much darker, and the fourth vein ends before the tip of the wing. Length, 6 mm.

Female. *Head* shining reddish, the face whitish pollinose; occiput with a brownish spot on either side above the neck. Front slightly wider than one eye, sparsely covered with short black hairs arising from very small punctures. Frontal and ocellar bristles weak, verticals moderately strong. Cheeks in profile a little more than one-half the eye height. Face concave in profile. *Proboscis* black; palpi reddish. *Antennae* reddish, the third segment about twice as long as wide, apex rounded, arista black, thickened on basal seventh, yellowish near base. *Thoracic dorsum* almost wholly bronze black, thickly ashy pollinose. Humeri and sides of mesonotum behind the suture shining reddish. Pleura mostly shining bluish black, propleura and mesopleura often reddish. Sternopleura and hypopleura lightly pollinose. Metanotum and pectus shining bluish black. Scutellum shining reddish. *Legs* reddish. Hind tibiae mostly black. One-half to three-fourths of outer surface of hind femora black, the middle tibiae sometimes darkened. *Wings* clear hyaline, veins yellow except on the dark areas, costal and subcostal cells almost black; triangular apical spot dark brown, extending from costa to fourth vein and to scarcely one-third of distance from posterior cross-vein; fourth vein ending before tip of wing. Squamae and knob of halteres white. *Abdomen* shining black, venter sometimes reddish at base.

Holotype, female, and paratypes, five females, Grotto Canyon, Death Valley, Inyo County, California, March 23, 1940 (Bernard Brookman). All specimens from human excrement. The holotype, No. 5230, has been deposited in the California Academy of Sciences; the paratypes are in the American Museum of Natural History.

#### *Euxesta anna* Harriot, new species

Would run to *notata* Wiedemann in Curran's key to American *Euxesta* Loew (Amer. Mus. Novitates, No. 812, p. 13) but the abdomen is differently colored, and the apex of the abdomen of the female is not yellowish. Differs from *pechumani* Curran in that the median brown spot does not extend beyond the second vein.

Female. *Front* dark reddish, narrower than one eye, black toward vertex and along upper margins bordering eyes; a whitish pollinose horizontal stripe bisecting front, sometimes indistinct. Posterior orbits whitish pollinose, broadly so below. Face concave in profile; the upper half of face and parafacials and cheeks whitish pollinose, the parafacials and cheeks reddish



in ground color; oral margin and clypeus shining steel blue. Cheeks about two-thirds as wide as eye height. *Proboscis* and palpi black. *Antennae* reddish, brown above; arista black, thickened on basal sixth. *Thorax* steel blue, thinly whitish pollinose; mesonotum, scutellum and pleura shining. *Legs* black or brownish, the trochanters, knees, tips of tibiae and metatarsi yellowish. *Wings* hyaline, veins yellowish, costal cell tinged with yellowish to a little beyond humeral cross-vein, a brown spot at apex of costal cell extending as far as second vein; stigma yellowish. The apical brown spot extends from costa back to about middle of apical cell. The fourth vein ends before tip of wing. Squamae white; knobs of halteres reddish. *Abdomen* dark shining metallic green or purple. Ovipositor black.

Male. Similar to the female.

Holotype, female, allotype, male, and three female paratypes, Tustin, California, June 14, 1938, J. G. Shanafelt (Cazier Collection). All of the types are in the American Museum of Natural History.

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#### A CAPTURE OF *LERODEA EUFALA* EDWARDS AT LIGHT

(Lepidoptera, Hesperiiidae)

On the night of September 28, 1940, Mansfield took a specimen of *Lerodea eufala* Edw. at a neon sign on Santa Clara Avenue, San Jose, California. The specimen is a female, and is the only record known to us of the species, from Santa Clara County. Tilden has taken the species in the San Joaquin Valley near Newman, where it is quite common, but we know no other case than the above, of its occurrence west of the Mt. Hamilton Range.

The capture of the specimen at light is especially interesting. Previous to this, our only captures of diurnals at lights were of the two species of nymphalids, *Vanessa caryæ* Hbn. and *Vanessa cardui* (L.), both of which are not infrequently taken in this manner.

There are scattered references in the literature to the capture of various butterflies at lights, although butterflies are not considered to be phototropic as a group. This is the first time that the capture of a skipper in such a manner has come to our attention.—J. W. TILDEN and G. S. MANSFIELD.